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03500.014384.1

PATENT APPLICATION



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)
: Examiner: R. Berry
MASAFUMI KYOGAKU ET AL.)
: Group Art Unit: 2818
U.S. Patent Appln. No. 10/775,181)
:
Filed: February 11, 2004)
:
For: ELECTRON-EMITTING DEVICE,)
ELECTRON SOURCE AND :
IMAGE-FORMING APPARATUS,)
AND MANUFACTURING :
METHODS THEREOF) October 18, 2004

Mail Stop
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

In compliance with the duty of disclosure under 37 C.F.R. § 1.56 and in accordance with the practice under 37 C.F.R. §§ 1.97 and 1.98, the Examiner's attention is directed to the documents listed on the enclosed Form PTO-1449. Copies of the listed documents are also enclosed.

Also enclosed are copies of a Japanese Notification of Refusal Reason (and an English translation thereof) issued by the Japanese Patent Office on September 7, 2004 in related Japanese Application No. 2002-119052, and an Examiner Refusal Decision (and

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an English translation thereof) issued by the Korean Patent Office on March 19, 2003 in a Korean counterpart application.

The Notification of Refusal Reason cites JP Laid-Open Gazette H09-35620, which is listed on the attached Form PTO-1449. For the concise statement of relevance of the Laid-Open Gazette, the Examiner is respectfully referred to its attached English abstract, the English version of the Notification of Refusal Reason, and the following representation:

H09-35620 discloses an activation process wherein pulse voltages are applied to conductive films in an atmosphere of material gas such as S_iH_4 , $S_{i2}H_8$, CH_4 , C_2H_6 etc., containing hydrogen gas to deposit carbon, S_i and a composite thereof which form a highly crystallized film. H09-35620 states that high crystallization means high occupancy of graphite or fine particles of S_iC and the degree of the crystallization is measured by TEM, Raman, etc.

It is also noted that Japanese documents 7-235255, 8-273523, and 64-19657 are cited in the Examiner Refusal Decision, and were cited previously in the Information Disclosure Statement filed on February 11, 2004. As a supplemental concise explanation of relevance of those documents, the Examiner is respectfully referred to the Examiner Refusal Decision (English version), and to the following representation.

Document 7-235255 discloses that deposits mainly comprising carbon is arranged in a gap of the conductive film by applying pulse voltages to the conductive film

in an atmosphere containing carbon. The paragraph [0118] states that electrically disconnections are partially formed in the deposits.

Document 8-273523 discloses in Figs. 1 (g) and (h) that film 8 of carbon or carbon composite is formed at the end portion of conductive film 4 in a lower potential side or at the end portion of conductive film in a higher potential side.

Document 64-019657 discloses that an electron emission part is formed by flowing a current through a thin film with heating the thin film by locally irradiating a laser light or infrared light.

CONCLUSION

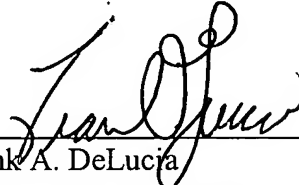
It is respectfully requested that the above information be considered by the Examiner and that a copy of the enclosed Form PTO-1449 be returned indicating that such information has been considered.

We also enclose a check for the required fee of \$180.00 to cover the Information Disclosure Statement. Please charge any deficiency in this fee, and credit any overpayment, to Deposit Account 06-1205.

Applicants' undersigned attorney may be reached in our New York office by

telephone at (212) 218-2100. All correspondence should continue to be directed to our address given below.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Frank A. DeLucia", is written over a horizontal line.

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